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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION II

DATE:

AUG 3 1992

SUBJECT:

Verification of Verbal Authorization to Conduct Removal Activities at the Hexagon Laboratories Site, Bronx,

New York

O30M:

Robert Montgomery, On-Scene Coordinator Technical Support Section

Kathleen C. Callahan, Director
Emergency and Remedial Response Division

THRU:

Richard C. Salkie, Associate Director for Removal and Emergency Preparedness Programs

The purpose of this memorandum is to confirm the Director's July 29, 1992 verbal approval of the proposed removal activities, as described herein at the Hexagon Laboratories Site, Bronx, New York.

On June 22, 1992, the New York State Department of Environmental Conservation (NYSDEC), Bureau of Enforcement Conservation Investigations requested that the U.S. Environmental Protection Agency (EPA) conduct a removal action to dispose of the hazardous materials at the site including approximately 50 containers of potentially shock sensitive materials. NYSDEC indicated that neither state or local organizations could provide further timely response activities. The materials were discovered during a State preliminary assessment of the site and referred to EPA.

On July 29, 1992, after receiving information from the NYCDEP and contacting the guard to obtain access, the On-Scene Coordinator visited the site to confirm the reported incident. The site is located in a commercial industrial area immediately adjacent to a stressed residential neighborhood. The site inspection revealed a total of containers higher in number than was originally reported. The majority of the containers appear to be reasonably intact, however, many are stacked several high and containers are strewn about the facility, including spilled mercury. A leaking water line is flooding one area of the facility were high organic vapor readings were detected. and other physical hazards along with poor lighting make the site unsafe to vandals and other trespassers who often enter the To verify that the material is hazardous, EPA collected samples of the material for laboratory analysis. onsite hazcatting and inventorying indicates the presence of hazardous substances including shock sensitive materials.

In response to the verbal authorization given on July 29, 1992, an Emergency Response Cleanup Contractor was activated to provide enhanced security and, under the supervision of EPA and NYCDEP, the cleanup contractor will segregate the material to obtain information on any responsible party and ensure stabilization

until information is obtained and investigated for criminal liability and cost recovery.

The anticipated total project ceiling for this action is not expected to exceed \$250,000, of which \$150,000 is for mitigation contracting. An Action Memorandum is being prepared to document this action and describe and request funds for mitigating the threat from the site. Enforcement actions have been initiated.

If you have any questions or comments on the proposed removal activities, please contact me or John Witkowski, respectively.

cc: R. Salkie, ERRD-ADREPP 🗸

- G. Pavlou, ERRD-DDO&PM
- G. Zachos, ERRD-RAB
- J. Witkowski, ERRD-RAB-TSS
- W. McCabe, ERRD-DDNYCP
- J. Marshall, EPD
- E. Schaaf, ORC-NYSUP
- R. Gherardi, OPM-FIN
- S. Luftig, OS-210
- T. Grier, OS-210
- M. O'Toole, NYSDEC

ATTACHMENT A ANALYTICAL DATA AND STATE REQUEST

New York State Department of Environmental Conservation 50 Wolf Road, Albany, New York 12233

Gr. Zachor-NM TSROO Thlaz (N.L.)

Commissioner

JN 22 1992

Ms. Kathleen C. Callahan
Director
Emergency & Remedial Response Division
USEPA
Region II
26 Federal Plaza

Dear Ms. Callahan:

New York, NY 10278

RE: Site Code #2-03-003 Hexagon Laboratories 3536 Peartree Avenue Bronx County, New York

The recently completed Preliminary Site Assessment of the referenced site has revealed several potentially dangerous conditions as the result of hazardous materials and hazardous wastes abandoned at Hexagon Labs.

The enclosed June 8, 1992 memo summarizes the conditions listed in the PSA report and the results of previous inspections conducted by the New York City Department of Environmental Protection.

This site was visited by staff from your Edison, New Jersey, Removal Programs Branch on Friday, June 12, 1992.

In addition to the hazardous wastes listed on the enclosed Table 4.5, taken from the PSA Report as prepared by Engineering-Science, Inc., there are approximately 300 different laboratory chemicals throughout the facility.

The NYSDEC hereby requests that the USEPA take appropriate immediate action under the emergency response program to abate the public health and environmental threats posed by the existing conditions at Hexagon Labs.

As further support and clarification of the reason for this request, we realize that under Section 4 of CERCLA, as amended by SARA, that the President of the United States may respond to any release or threat of a release of a hazardous substance, if in the President's discretion it constitutes a public health or environmental emergency and no other person with the capability and authority to respond to the emergency will do so in a timely manner.

We have enclosed a location plan, site plan and some liquid and soil sample analytical data for your reference. The draft PSA report is available if you require additional information.

If you have any questions, please contact Mr. Alan Rockmore, P.E., of my staff at (518) 457-9280.

Sincerely,

Michael J. O' Toole, Jr.

Director

Div. of Hazardous Waste Remediation

Enclosure

cc:

R. Salkie - USEPA, Region II G. Zachos - USEPA, Regionali

G. Carlson - NYSDOH



New York State Department of Environmental Conservation

MEMORANDUM

0 1992

TO: FROM: SUBJECT: Al Rockmore, Director, Bureau of Construction Services Earl Barcomb, Director, Bureau of Hazardous Site Control Hexagon Labs, Bronx County, Site No. 203003

SHIS.

DATE:

June 8, 1992

The Hexagon Laboratories, Inc. site, located at 3536 Peartree Avenue in Bronx County, is recommended for an immediate removal action. This site is currently the subject of a BHSC Preliminary Site Assessment Investigation. Task one of this investigation has revealed potentially dangerous site conditions.

Specifically:

- o Approximately 100 drums are stored in a warehouse on site. During the December 1991 site walkover, the drums appeared to be physically intact. Now, however, most of the labels are absent or unreadable. The drums are stacked two high and are reported to contain former raw materials and products including acrylamide (U007), copper cyanide (P029), cumene (U055), ethyl acetate (U0112), paraldehyde (U182), sodium cyanide (P106), and tetrahydrofuran ((U213).
- Characteristic hazardous wastes may still be on site in appreciable quantities. These include ignitable organic solvents, corrosive inorganic acids, and reactives such as vinylidene chloride, lithium and sodium metal, and compressed gases. These items may be located in areas other than the war: house:
 - A laboratory area on the second floor contains numerous shelves and cabinets filled with lab reagent sized (1 gal. or less) containers of a vast variety of substances. The chemicals did not appear to be organized in any rational fashion during the 1991 walkover. The area includes a cardboard box of lecture bottles, and several extremely rusted containers of the style ethers are stored in.
 - o A 1987 sampling of an abandoned on-site well revealed a 15-foot-thick hydrocarbon layer containing ethylene dichloride (350 ppm), toluene (6300 ppm), xylene (14,000 ppm), and PCB aroclor 1242 (47 ppm).

Much of the property remaining on this site appears to be in deteriorating physical condition. The site has only one remaining employee responsible for security and simple maintenance. There are approximately 381,000 people within a three mile radius that would be at risk should incompatible or reactive substances on site be mixed due to drum failure, fire, or explosion.

The contact person for this site in the Bureau of Hazardous Site Control is Cynthia Whitfield.

cc: D. Chaffin

TABLE 4.5

WASTES GENERATED ON-SITE HEXAGON LABORATORIES, INC. SITE BRONX COUNTY, NEW YORK

| CAS # | CHEMICAL | PHYSICAL STATE | CODE | CHARACTERISTIC | REFERENCE |
|------------|------------------------------------|-------------------|-----------|----------------|---------------|
| 67-64-1 | acelone | Liquid . | F003 | | NYSDEC, 1987a |
| 67485-29-4 | amdro waste | | D002 | Corrosive | HEXAGON, 1985 |
| 64706-54-3 | bepridil (UN 1993) | Liquid | D001 | Flammable | HEXAGON, 1986 |
| 71-55-6 | chlorothene (UN 1037) | Liquid | D002 | Flammable | HEXAGON, 1986 |
| not listed | dibromo butanol | | F002 | 150 | HEXAGON, 1985 |
| not listed | dilsobutylene | Liquid | D001 | Flammable | HEXAGON, 1986 |
| not listed | disopropyl pheniramine nitril | | D001 | | HEXAGON, 1985 |
| not listed | diparaxylene | -Liquid/Solid | D001 | Flammable | HEXAGON, 1986 |
| not listed | diparaxylene oxide | Liquid | D001 | Flammable | HEXAGON, 1986 |
| not listed | diphenol oxlde | Solid | · D001 | Flammable | HEXAGON, 1986 |
| 75-35-4 | ethylene dichloride | Liquid | D001 | Flammable | HEXAGON, 1986 |
| not listed | floor strippings | _ <u>.</u> . | D001 | | HEXAGON, 1985 |
| not listed | lead contaminated sewer sludge | Solid | D008 | | NYSDEC, 1987a |
| 67-56-1 | methanol | Liquid | F003 | | NYSDEC, 1987a |
| not listed | nitrile (Step II) | Liquid | | Ignitable . | HEXAGON, 1986 |
| not listed | paramethoxy aceto nitrile | | D000 | | HEXAGON, 1984 |
| not listed | paramethoxy phenyl acetic acid | Liquid | D001 | Flammable | HEXAGON, 1986 |
| not listed | paramethoxyl phenyl acetonitrile | | D001 | | HEXAGON, 1985 |
| not listed | spent activated carbon | Solid | D001 | | NYSDEC, 1987a |
| not listed | still bottom waste | | F001-F005 | | NYSDEC, 1987a |
| 108-88-3 | toluene | Liquid | U220 | Flammable | HEXAGON, 1986 |
| not listed | toluene ethylene dichloride | Solld | D001 | Flammable | HEXAGON, 1986 |
| not listed | trimethyl phenyl ammonium chloride | | | ' | HEXAGON, 1985 |
| not listed | UN 1760 | | D002 | Corrosive | HEXAGON, 1986 |

TABLE 4.6

SAMPLE ANALYTICAL RESULTS FOR SAMPLE FROM LIQUID SEEPING FROM HEXAGON (NYTL, 1981) HEXAGON LABORATORIES, INC. SITE BRONX COUNTY, NEW YORK

| | PARAMETER \1 | | UNITS | CONCENTRATION |
|-----|----------------------------|--------------|---------|---------------|
| | Acrolein | 2 | ppb | 10 U |
| | Acrylonitrile | | ppb | 10 U |
| | Benzene | | ppb | 755 |
| | Bis (chloro-methyl) ether | | ppb | 10 U |
| 24 | Bromoform | | ppb | 10 U - |
| | Carbon tetrachloride | • | ppb | 10 U |
| | Chlorobenzene | | ppb | 653 |
| | Chlorodibromomethane | | ppb | 10 U |
| | Chloroethane | | ppb | 10 U |
| | 2-Chloroethylvinyl ether | | ppb ppb | 10 U |
| 120 | Chloroform | g | ppb | - 10 U |
| | 1,1-Dichloroethane | | ppb | 10 U |
| 2 | 1,2-Dichloroethane | | ppb | 10 U |
|) | 1,1-Dichloroethylene | | ppb . | 10 U |
| | 1,2-Dichloropropane · | 9 | ppb | 10 U |
| | 1,2-Dichloropropylene | | ppb | 10 U |
| | Ethylbenzene | | ppb | 171 |
| | Methyl bromide | | ppb | 10 U |
| | Methyl chloride | | ppb | 10 U |
| | Methylene chloride | | ppb | 613 |
| | 1,1,2,2-Tetrachloroethane | | ppb | 10 U |
| | Tetrachloroethylene | ,* | ppb | 10 U |
| | Toluene | Ä | ppb | 10 U |
| | 1,2-trans-Dichloroethylene | | ppb | 10 U |
| | 1,1,1-Trichloroethane | | ppb | 10 U |
| | 1,1,2-Trichloroethane | | ppb | 10 U |
| | Trichloroethylene | 3 4 3 | ppb · | 429 |
| | Trichlorofluoromethane | | ppb | . 10 U |
| | Vinyl chloride | | ppb | 10 U |

^{\1 =} Analysis for NYSDEC by New York Testing Laboratories, Inc., Westbury, New York, April 1981 (NYTL, 1981).

U = Compound analyzed for but not detected. Posted concentration is the method detection limit.



SOIL SAMPLE ANALYTICAL RESULTS BY EP TOX METHOD FOR FORMER BRONX AUTO WRECKING AND SALVAGE, INC. (ITL, 1989) HEXAGON LABORATORIES, INC. SITE BRONX COUNTY, NEW YORK

| PARAMETER \1 | UNITS | REGULATORY LIMIT | SAMPLE #1 | SAMPLE #2 | SAMPLE #3 |
|-------------------|-------|---------------------|-----------|--------------|-----------|
| Arsenic | ppb | 5000 | _ | <u>-</u> , | _ |
| Barium | ppb | 100,000 | 5000 | 4000 | 6000 |
| Jadmium | ppb | 1000 | - | - | |
| Chromium | ppb · | 5000 | 1 | 2 | 5 |
| Lead . | ppb | 5000 | 6.3 | 0.6 | 12.4 |
| Mercury | ppb | 200 | - | - | - |
| Selenium | ppb | ` 1000 | - | _ | - |
| Silver. | ppb | 5000 | - | · - | - |
| | | * | * | | • |
| Endrin | ppb | 20 | 1 | • | · - ' |
| Lindane | ppb | 400 | · - | - | - ' |
| Methoxychlor | ppb | . 10,000 | . 2 | ## · | 1 |
| Toxaphene | ppb | 500 | 8 | . 1 " | 50 |
| 2,4,-D | ppb | 10,000 | 40 | 50 | 60 |
| 2,4-TP | ppb | 1000 | 50 | 80 | 80 |
| Total hydrocarbon | ppb | | 4500 | 4500 | 5700 |

^{\1 =} Analysis for BAWS by Independent Testing Laboratories, Inc., College Point, New York, July, 1989 (ITL, 1989).

^{- =} Not detected above method detection limit.

TABLE 4.8

SOIL SAMPLE ANALYTICAL RESULTS BY TCLP METHOD FOR FORMER BRONX AUTO WRECKING AND SALVAGE, INC. (PA, 1990) HEXAGON LABORATORY SITE BRONX COUNTY, NEW YORK

| | PARAMETER \1 | UNITS | CONCENTRATION |
|----|--|---|---------------|
| | Acetone | ppb | 1.0 U |
| | Benzene | | 1.0 U |
| | n-Butylaicohol | ppb | 1.0 U |
| | Carbon disulfide | ppb | 1.0 U |
| | The state of the s | ppb | |
| | Carbon tetrachloride | ppb | 1.0 U |
| | Chlorobenzene | ppb | 1.0 U |
| | Chloroform | ppb | 1.0 U |
| | 1,2-Dichloroethane | ppb | 1.0 U |
| | 1,1 - Dichloroethylene | ppb | 1.0 U |
| | Ethyl acetate | ppb | 1.0 U |
| | Ethyl benzene | ppb | 1.0 Ų |
| | Ethyl ether | ppb | 1.0 U |
| | isobutanol | ppb | 1.0 U |
| | Methanol | ppb | 1.0 U |
| 0 | Methylene chloride | ppb | 1.0 U |
| • | Methyl ethyl ketone | ppb | 1.0 U |
| | Methyl isobutyl ketone | ppb | 1.0 U |
| | Tetrachioroethylene | ppb | 1.0 U |
| | Toluene | ppb | 1.0 U |
| | 1,1,1—Trichloroethylene | • | 1.0 U |
| | | ppb | |
| | Trichlorofluoromethane | ppb | 1.0 U |
| | 1,1,2-Trichloro-1,2,2-trifluoroethane | ppb | 1.0 U |
| | Vinyl chloride | ppb | 1.0 U |
| | Xylene | ppb | 1.0 U |
| | Total cresol | ppb | 1.0 U |
| • | 1,4-Dichlorobenzene | ppb | 1.0 U |
| | 2,4 - Dinitrotoluene | ppb | 1.0 U |
| | Hexachloro benzene | ppb | 1.0 U |
| | Hexachloro - 1,3-butadiene | ppb | .0 U |
| | Hexachioroethane | ppb | 1.0 U |
| | Nitrobenzene | ppb | 1.0 U |
| | Pertachiorophenol | ppb | 1.0 U |
| | Pyridine | ppb | 1.0 U |
| | 2,4,5-Trichlorophenol | ppb | 1.0 U |
| | 2,4,6—Trichlorophenol | . ppb | 1.0 U |
| | | 1000 | |
| | Aroclor 1016 | ppb | 1.0 U |
| | Aroclor 1221 | ppb | 1.0 U |
| | Arodor 1232 | ppb | · 1.0 U |
| | Aroclor 1242 | ppb | 1.0 U |
| | Aroclor 1248 | ppb | 1.0 U |
| | Aroclor 1254 | ppb | 1.0 U |
| | Aroclor 1260 | ppb | 1.0 U . |
| | Arsenic* | ppb | 1.0 U |
| 39 | Barium ' | ppb | 380 |
| | Cadmium | ppb | 30 U |
| | Chromium | ppb | 20 U |
| | Lead | . bbp | 50 U |
| | Mercury | ppb | 0.7 |
| | | | |
| | Selenium , | - ppb | 1 U 20 U |
| | Silver | ppb | 20 U |
| | | | |

U = Compound analyzed for but not detected.

^{1 =} Analysis for Tuto's Dairy by Pednault Associates, Inc., Bohemia, New York, October 1990 (PA, 1990).

TABLE 4.9

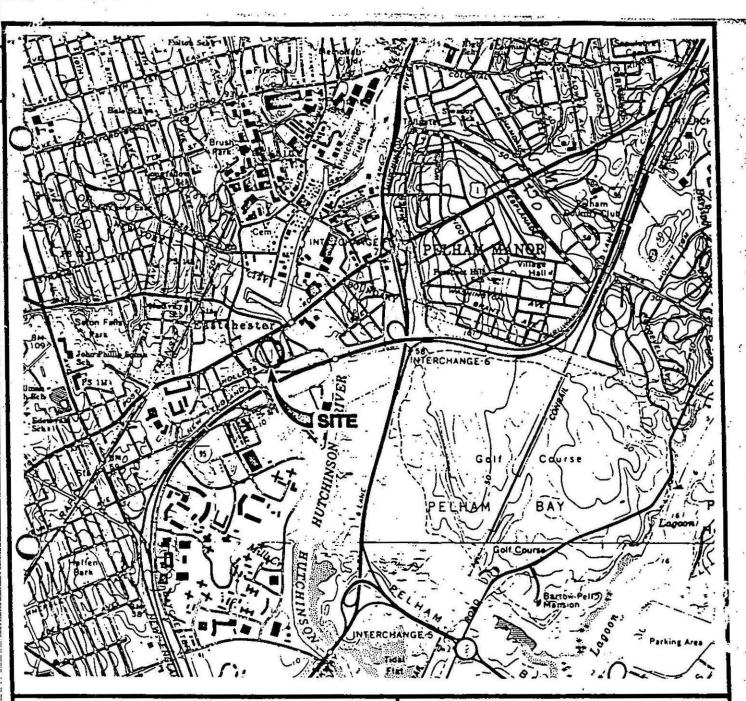
CHYDROCARBON LAYER IN WELL WATER SAMPLE (NYTEST, 1987) HEXAGON LABORATORIES, INC. SITE BRONX COUNTY, NEW YORK

| | PARAMETER \1 | Units | Concentration |
|---|------------------------------|------------|-----------------|
| | Heating value | ∂TU/gallon | 139215 |
| | Chlorides | % | < 0.1 |
| | pH at 20 deg. C | _ | 5.7 |
| | Corrosivity | inch/year | < 0.1 |
| | Reactivity to cyanide | ppm | < 1 |
| | Reactivity to sulfide | ppm | < 1 |
| | Ignitability | deg F | > 212 |
| | Isopropyl | ppm | 5000 U |
| | Chloroethane | ppm | 5000 U |
| | Acetone | ppm | 5000 U |
| | Diethyl ketone | ppm | 5000 U |
| | Ethylene dichloride | ppm | 350 |
| | Toluene | ppm | 6300 |
| | Xylene (total) | ppm | 14000 |
|) | Aroclor 1016 | nom | 8 U |
| | Aroclor 1221 | ppm | 8 U |
| | Aroclor 1232 | ppm · | 8 U |
| | Aroclor 1242 | ppm | 47.005 |
| | Aroclor 1242 Aroclor 1248 | ppm | 47.335 ; 8 U |
| 9 | | ppm | 12 U |
| | Aroclor 1254 Aroclor 1260 | ppm ppm | 12 U |

^{\1 =} Analysis for Leggette, Brashears, and Graham, Inc. by NYTEST Environmental, Inc., New York, September 1987 (NYTEST, 1987).

Note: Data missing for two groundwater samples collected during sampling effort.

U = Compound analyzed but not detected.



SOURCE: U.S.G.S. 7.5 SERIES TOPOGRAPHIC MAPS; MOUNT VERNON AND FLUSHING, N.Y. QUADRANGLES, 1966, PHOTOREVISED 1979.





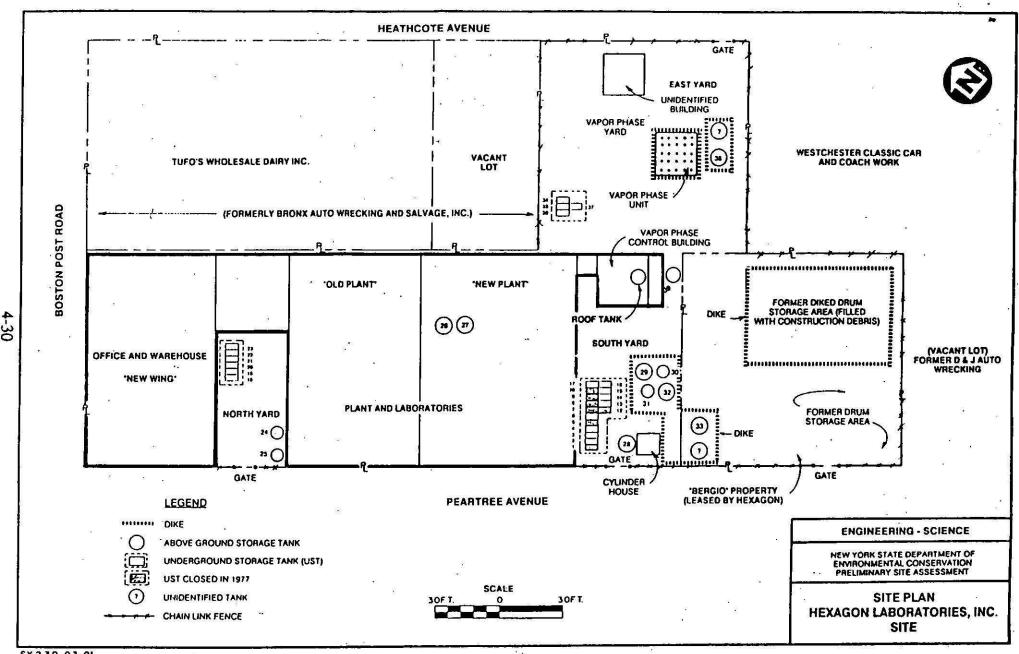
LATITUDE: 40°53'13" LONGITUDE: 73°49'34° SCALE 0 2000 4000 FT.

ENGINEERING-SCIENCE

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION PRELIMINARY SITE ASSESSMENT

SITE LOCATION HEXAGON LABORATORIES, INC. SITE

FIGURE 4.2



SY 2 30. 03.01